

**REMARKS/ARGUMENTS**

In response to the final Office Action mailed February 11, 2004, applicant respectfully requests reconsideration. In the Office Action, the rejection of claims 1-17 was sustained. No amendments have been made to the Specification or the claims. Accordingly, claims 1-17 remain pending in this application.

The examiner has sustained the 35 U.S.C. §103(a) rejection of claim 1-17. In support of the examiner's position, several portions of the Nagami patent are cited. To the extent that the applicants understand the rationale provided by the examiner, each of the citations will be addressed.

In Part 2A of the Office Action, the examiner states that Nagami teaches processing to reduce TTL and cites col. 1, lines 20-40; col. 16, lines 51-59; col. 28, lines 46-61; and col. 29, lines 1-15 and 57-62. In these portions of the patent, the only reference to reducing the TTL occurs in column 1 and column 16, where the patent mentions that the TTL is reduced. As set forth in applicants' previous response, Nagami does not teach or suggest how or to what length the TTL is reduced. There is no mention in the column 28 and 29 portions of the patent cited by the examiner of the reduction of the TTL.

In Part 2B, the examiner cites column 16, lines 51-65 of Nagami to support the proposition that Nagami teaches rewriting a header of a datagram to reduce TTL based on the maximum length of the LAN. However, this is not the case. As described by Nagami, the step of dividing of the datagram is separate from the step of rewriting of the header. The patent is silent on the criteria for reducing the TTL. The datagram is divided for the purpose of fitting the datagram into a maximum frame length, not for the purpose of reducing the TTL provided for in the header.

In Part 2C, the examiner states that col. 17, lines 17-44 and col. 23, lines 28-50 teach that the system calculates the number of hop addresses representing "the path or route length of the message (or maximum path length)". In the first Office Action and in the final Office Action, the examiner explicitly stated that Nagami does not detail

maximum length as maximum path length (page 4, line 15 of the final Office Action). However, in this portion of the final Office Action, the examiner seems to believe that Nagami does teach maximum path length. A thorough reading and analysis of the patent, and particularly, the portion of the patent cited by the examiner, indicate no such teaching by Nagami.

The examiner has the burden of supporting the position taken by the examiner that the cited references teach the claimed invention. Citing to multi-paragraph portions of the patent without specifically pointing out the support in the reference for the examiner's position does not provide the applicant with any indication of how to respond to the examiner's position, particularly when the examiner's position contradicts itself in different parts of the Office Action.

In Part 2D, the examiner again cites col. 1, lines 20-40 for the proposition that it is known to modify a frame or field of a message to improve the routing process. The examiner also cites col. 21, lines 10-21 and col. 22, lines 27-38 and states that "[b]y changing the internal configuration of datagram or the next hop address field of message which resulted to a maximum or minimum path or route." However, the examiner still has not shown where Nagami either teaches or suggests the invention recited in the claims, why it is proper to combine Nagami and Yener or how the combination of Nagami and Yener teach the claimed invention.

Based on the following arguments, applicants assert that claims 1-17 are allowable over the cited references, as Yener does not teach adjusting a portion of a message packet according to a maximum path length and therefore, the combination of Nagami and Yener is improper and does not teach the claimed invention.

#### Claim Rejection Under 35 U.S.C. §103

Claims 1-17 were finally rejected under 35 U.S.C. §103(a) as being unpatentable over Nagami et al. in view of Yener et al. The examiner states that Nagami discloses a firewall for transferring message packets from an external network to a local area network including a message receiver, a message transmitter and a message processor for processing a message packet to provide a time to live value selected to be related to a

maximum length for message packets transferred over the local area network. The examiner states that, although Nagami does not detail maximum length as maximum path length, Yener teaches maximum route length and therefore, it would have been obvious to combine Nagami and Yener to arrive at the claimed invention. This rejection is respectfully traversed as Yener does not teach adjusting a portion of a message packet according to a maximum path length and therefore, the combination of Nagami and Yener is improper and does not teach the claimed invention.

Independent claim 1 recites a firewall for transferring message packets from an external network to a local area network, at least one of the message packets including a time to live field including a time to live value, the firewall comprising:

- A. a message receiver configured to receive the at least one of the message packets from the external network;
- B. a message processor configured to process the at least one message packet to provide, in the time to live field, a time to live value selected to be related to a maximum path length for message packets transferred over the local area network; and
- C. a message transmitter configured to transmit the at least one message packet as processed by the message processor over the local area network.

Although Nagami briefly refers to reducing TTL or time to live, carried out by the datagram processing unit, Nagami offers no details whatsoever as to how this is done or to what the TTL is reduced. The examiner has admitted that "Nagami did not detail maximum length as maximum path length." In fact, however, Nagami does not provide any details as to the maximum length of the TTL, either before it is reduced or after. The only references to TTL by Nagami are in Col. 16, line 53 and Col. 27, line 22. Nagami only states that the TTL is reduced.

The examiner relies on Yener for the proposition that it would have been obvious to modify Nagami to incorporate maximum route length as taught Yener. However, Yener does not teach modifying a field of a message packet in order to dictate the maximum path length for the message packet. The Yener system has nothing to do with modifying message packets. The Yener system is directed to construction of networks while keeping the degree of each node of the network constant. See page 14, lines 5-22. Yener explicitly states that his objective is to design networks with a constrained number

of links for engineering purposes (page 14, lines 12-13). His construction method involves a scaling formula to determine optimal characteristics of a particular network. Yener does not address in any way the configuration of the message packets that are transferred throughout the network. When Yener refers to a maximum route length, he is referring to the dimensional relationship between nodes of a network, which has nothing to do with the time to live of a message packet.

Nagami does not teach or suggest in any way that the time to live of a message packet can be modified to limit the message packet to a maximum path length and Yener is not at all concerned with the configuration of the message packet being transferred through his system. Accordingly, the combination of the two references certainly cannot teach the invention recited in independent claim 1 which recites, among other features, providing "a time to live value selected to be related to a maximum path length for message packets transferred over the local area network". Furthermore, Nagami is solely directed to routers within a LAN, while the invention recited in independent claim 1 is directed to a firewall which transfers message packets from an external network to a local area network. Therefore independent claim 1 is allowable over the combination cited by the examiner and the rejection under 35 U.S.C. §103(a) should be withdrawn.

Claims 2-6 depend from independent claim 1 and are allowable for at least the same reasons as independent claim 1.

Independent claim 7 recites a device for generating and transmitting at least one message packet over a network, the at least one message packet including a time to live field including a time to live value, the device comprising:

- A. a message generator configured to generate the at least one message packet and provide, in the time to live field, a time to live value selected to be related to a maximum path length for message packets transferred over the local area network; and
- B. a message transmitter configured to transmit the at least one message packet as generated by the message generator over the network.

As set forth above, Nagami does not teach or suggest in any way that the time to live of a message packet can be modified to limit the message packet to a maximum path length and Yener is not at all concerned with the configuration of the message packet being transferred through his system. Accordingly, the combination of the two references

Independent claim 14 recites a method of generating and transmitting at least one message packet over network, the at least one message packet including a time to live field including a time to live value, the device comprising:

- A. generating the at least one message packet and provide, in the time to live field, a time to live value selected to be related to a maximum path length for message packets transferred over the network; and
- B. transmitting the at least one message packet as generated by the message generator over the network

As set forth above, Nagami does not teach or suggest in any way that the time to live of a message packet can be modified to limit the message packet to a maximum path length and Yener is not at all concerned with the configuration of the message packet being transferred through his system. Accordingly, the combination of the two references certainly cannot teach the invention recited in independent claim 14 which recites, among other features, providing "a time to live value selected to be related to a maximum path length for message packets transferred over the network". Furthermore, Nagami is solely directed to routers within a LAN, while the invention recited in independent claim 14 is directed to a firewall which transfers message packets from an external network to a local area network. Therefore independent claim 14 is allowable over the combination cited by the examiner and the rejection under 35 U.S.C. §103(a) should be withdrawn.

Independent claim 15 recites a computer program product for use in connection with a computer to provide a firewall for transferring message packets from an external network to a local area network, at least one of the message packets including a time to live field including a time to live value, the computer program product comprising a computer-readable medium having encoded thereon a message processor module configured to enable the computer process the at least one message packet to provide, in the time to live field, a time to live value selected to be related to a maximum path length for message packets transferred over the local area network.

As set forth above, Nagami does not teach or suggest in any way that the time to live of a message packet can be modified to limit the message packet to a maximum path length and Yener is not at all concerned with the configuration of the message packet being transferred through his system. Accordingly, the combination of the two references

certainly cannot teach the invention recited in independent claim 7 which recites, among other features, providing "a time to live value selected to be related to a maximum path length for message packets transferred over the network". Furthermore, Nagami is solely directed to routers within a LAN, while the invention recited in independent claim 7 is directed to a firewall which transfers message packets from an external network to a local area network. Therefore independent claim 7 is allowable over the combination cited by the examiner and the rejection under 35 U.S.C. §103(a) should be withdrawn.

Independent claim 8 recites a method of transferring message packets from an external network to a local area network, at least one of the message packets including a time to live field including a time to live value, the method comprising:

- A. receiving the at least one of the message packets from the external network;
- B. processing the at least one message packet to provide, in the time to live field, a time to live value selected to be related to a maximum path length for message packets transferred over the local area network; and
- C. transmitting the at least one message packet as processed by the message processor over the local area network.

As set forth above, Nagami does not teach or suggest in any way that the time to live of a message packet can be modified to limit the message packet to a maximum path length and Yener is not at all concerned with the configuration of the message packet being transferred through his system. Accordingly, the combination of the two references certainly cannot teach the invention recited in independent claim 8 which recites, among other features, providing "a time to live value selected to be related to a maximum path length for message packets transferred over the network". Furthermore, Nagami is solely directed to routers within a LAN, while the invention recited in independent claim 8 is directed to a firewall which transfers message packets from an external network to a local area network. Therefore independent claim 8 is allowable over the combination cited by the examiner and the rejection under 35 U.S.C. §103(a) should be withdrawn.

Claims 9-13 depend from independent claim 8 and are allowable for at least the same reasons as independent claim 8.

certainly cannot teach the invention recited in independent claim 15 which recites, among other features, providing "a time to live value selected to be related to a maximum path length for message packets transferred over the network". Furthermore, Nagami is solely directed to routers within a LAN, while the invention recited in independent claim 15 is directed to a firewall which transfers message packets from an external network to a local area network. Therefore independent claim 15 is allowable over the combination cited by the examiner and the rejection under 35 U.S.C. §103(a) should be withdrawn.

Claim 16 depends from independent claim 15 and is allowable for at least the same reasons as independent claim 15.

Independent claim 17 recites a computer program product for use in connection with a computer to provide a device for generating and transmitting at least one message packet over network, the at least one of the message packet including a time to live field including a time to live value, the computer program product comprising a computer-readable medium having encoded thereon a message generator configured to generate the at least one message packet and provide, in the time to live field, a time to live value selected to be related to a maximum path length for message packets transferred over the local area network.

As set forth above, Nagami does not teach or suggest in any way that the time to live of a message packet can be modified to limit the message packet to a maximum path length and Yener is not at all concerned with the configuration of the message packet being transferred through his system. Accordingly, the combination of the two references certainly cannot teach the invention recited in independent claim 17 which recites, among other features, providing "a time to live value selected to be related to a maximum path length for message packets transferred over the network". Furthermore, Nagami is solely directed to routers within a LAN, while the invention recited in independent claim 17 is directed to a firewall which transfers message packets from an external network to a local area network. Therefore independent claim 17 is allowable over the combination cited by the examiner and the rejection under 35 U.S.C. §103(a) should be withdrawn.

Based on the foregoing amendments and remarks, applicant asserts that pending claims 1-17 are allowable over the prior art of record and respectfully requests that a timely Notice of Allowance be issued in this application.

In the event the Examiner deems personal contact desirable in the disposition of this case, the Examiner is invited to call the undersigned attorney at 508.293.7835.

Please charge any fees occasioned by this submission to Deposit Account No. 05-0889.

Respectfully submitted,

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Date

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